## Note

Elatophilus oculatus (Drake and Harris) (Hemiptera: Heteroptera: Anthocoridae)
Attracted to Pheromone of Matsucoccus Cockerell
(Hemiptera: Sternorrhyncha: Matsucoccidae) in Arizona

Mendel et al. (2004) published an interesting account of Anthocoridae (Hemiptera: Heteroptera) and Hemerobiidae (Neuroptera) attracted to the sex pheromones of scale insects of the genus *Matsucoccus* Cockerell (Hemiptera: Sternorrhyncha: Matsucoccidae). Pheromone-baited traps were placed in the Canary Islands, China, Crete, Cyprus, France, ISreal, Portugal, Spain, Turkey, Ukraine, and the United States (Arizona, Massachusetts, and New York). This note deals with the Anthocoridae attracted to baited traps in the United States.

Elotopilus inimicus (Drake and Harris) was described from New York in 1926. Lussier (1965) wrote a thesis on this anthocorid and its relationship with Matsucoccus resinosae Bean and Goodwin (= M. matsumurae Kumana) found on Pinus resinosa Ait. Despite this paper, Kelton (1976) felt that P. banksiana Lamb, was its main host. Lattin and Stanton (1993) discussed E. inimucus as a predator of the red pine scale and reviewed the literature on this relationship (Doane 1965, Dross 1985, Mendel et al. 1991). Mendel et al. (2004) reported that E. inimica was attracted to a pheromone of Matsucoccus feytaudi Ducasse and M. matsumurae Kuwana in Massachusetts and New York.

Mendel et al. (2004) cited a species of *Elatophilus* as being attracted to the pheromone of the exotic *Matsucoccus feytaudi* at Lake Mary, Coconono County, Arizona, in August, 2001, stating that *Pinus ponderosa* Dougl. ex Laws was the host tree involved (note: This tree is the subspecies *Pinus ponderosa scropulorus* Engelm. in that area). I have collected nymphs of *Elatophilus oculatus* (Drake and Harris) from *Pinus* 

ponderosa scropulorum on May 9, 2001 at Williams, Arizona, approximately 40 miles west northwest of Lake Mary. Williams, Arizona is the type locality of *E. oculatus*. Only specimens of the aphid genus Cinara sp. were taken with the bugs by beating. The Matsucoccus would be under the bark or in needle sheaths and thus not readily visible. This is the dominant tree throughout much of the southern Rocky Mountains. Further, I have identified specimens of E. oculatus in the Canadian National Collection from Mt. Lemmon, Arizona, on P. ponderosa scropulorum. Many other specimens were identified from six localities in Colorado, including my collection of the bug on P. ponderosa scropulorum at Estes Park, Colorado, all in the Rocky Mountain area of the state. A few specimens from this material had been taken from Pinus monticola Dougl. ex D. Don, P. flexilis James, P. contorta latifolia Engelm., and Pseudotsuga taxifolia (Lamb.) Britton. These specimens were collected from late July to early September in Arizona and Colorada. No other species of Elatophilus is known from Pinus ponderosa scropulorum in Arizona or Colorado. A related species, Elatophilus pullus Kelton and Anderson, occurs from Oregon north to British Columbia on P. ponderosa Dougl. ex Laws. Thus, it is clear that the species of Elatophilus cited by Mendel et al. (2004) as being attracted to the pheromone of Matsucoccus feytaudi should be regarded as E. oculatus. It seems reasonable that E. oculatus also will feed on a native species of Matsucoccus besides aphids early in the season.

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